

Year group:
Year 1



Term: Spring

Construction
and mechanisms

National Curriculum: Design purposeful, functional, appealing products for themselves and other users based on design criteria. Select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing). Explore and evaluate a range of existing products. Evaluate their ideas and products against design criteria, build structures, exploring how they can be made stronger, stiffer and more stable. Explore the use of mechanisms (for example, levers, sliders, wheels or axles) in their products.

Key Knowledge and skills

To recognise different types of movement within simple moving objects.

To measure and mark out accurately using a ruler.

To use tools for cutting safely and effectively.

Use materials to practise drilling, screwing, gluing and nailing materials to make and strengthen products.

To test out their design ideas before proceeding.

To test the mechanisms (sliders and levers) and make adjustments where necessary.

Demonstrate a range of cutting and shaping techniques (such as tearing, cutting, folding and curling).

Evaluate their ideas against a design criteria that has been created as a class.

Vocabulary

Paper fastener	A fastener which is inserted into holes in the stack of paper, and the parts of the legs are separated and bent over to secure the paper.
Lever	A rigid bar which moves around a pivot. Levers are used in many everyday products. Card strips can be used to make levers.
Mechanism	A device used to create movement in a product.
Material	A physical substance that things can be made from.
Slider	A rigid bar which moves backwards and forwards along a straight line. Unlike a lever, a slider does not have a pivot point.
Slot	The hole through which a lever or slider is placed to enable part of a picture to move.
Guide or bridge	A short card strip used to keep sliders in place and control movement.
Design	Plan or drawing to show the look and function of an object.

Evaluate

What are the main types of movement?

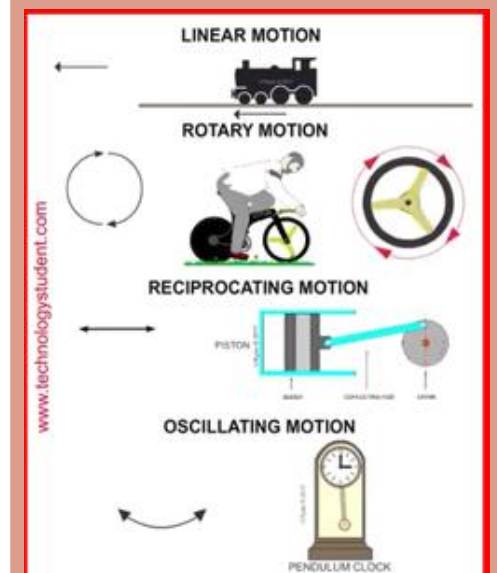
How does a slider and lever mechanism work?

What improvements can you make to make the mechanisms work better?

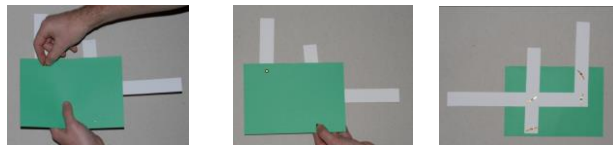
What shaping techniques did you use to make your picture?



Types of movement:



Making the linkage



Connecting the two fixed pivots



Outcome

To design and make a moving picture that tells a story based on 'Life down under' using sliders or levers

